Philippine Renewable Energy Project (PREP)

by Laura Vimmerstedt 12/99

Background

Through the Philippine Renewable Energy Project (PREP), the United States Agency for International Development (USAID) is funding technical assistance to the Government of the Philippines (GOP), under the management of the National Renewable Energy Laboratory (NREL).

NREL's technical assistance project is intended to support the analysis, development, implementation, and evaluation of the USAID/Manila Mission's Climate Change Mitigation program, with emphasis on renewable energy activities. This assistance will be provided within the framework of USAID/Manila's support to the GOP on Strategic Objective 5 (SO5), *Climate Change Mitigation*, and as such will also support achievement of the goals and objectives of the GOP's Inter-Agency Committee on Climate Change (IACCC). Specifically, it will be directed towards supporting reductions in the use of fossil fuel-based energy through cleaner fuel technologies and/or increased efficiency in energy generation, transmission, and/or distribution. NREL's technical assistance will simultaneously support the GOP's poverty alleviation efforts by identifying opportunities for renewable energy to be used to contribute to economic development.

The purpose of SO5 is to reduce the growth of emissions of greenhouse gases in the Philippines through the development of appropriate policies and regulations, and improved access to information and technology, that encourage the use of cleaner fuels and energy efficiency measures in the power sector. Renewable energy is a key component of the program, and has been identified by the GOP as being a priority activity as the nation enters the twenty-first century. In this regard, the GOP's draft *National Action Plan on Climate Change* (November, 1997:1) states that "the first recommendation of this paper...is to shift the energy mix away from fossil fuels towards renewables." This is an activity of the highest priority.

Overall guidance and management of this assistance will be provided by USAID's Office of Environmental Management and the SO5 Executive Committee. They will work with NREL to assure that these activities directly support SO5's performance indicators and results targets. At the same time, this assistance should retain sufficient flexibility to be responsive to evolving GOP needs and capabilities; this becomes even more important with the recent change in GOP administrations and changes in the electric sector. This project began in January 1999 and is expected to end on or before December 31, 2000.

Scope

The Philippines Renewable Energy Project has the following tasks that are at least partly related to village power, as well as a Wind Farm Analysis task that is not related to village power:

- Renewable Energy Market Infrastructure
- Diesel Mini-Grid Retrofit
- Biomass/Bioenergy and Combined Heat and Power (delete the dash)
- Analysis of Alternatives for Rural Electrification
- Policy Analysis and Assistance
- Technology Cooperation Agreement Pilot Project
- Micro-hydro and Solar Resource Assessments
- Geographic Information System for Targeting Renewable Energy Deployment

Status and Planned Activities

The Philippines Renewable Energy Project has made significant progress. The Project developed the official work plan for the eleven tasks of the project, established strong working relationships with GOP counterparts, completed initial deliverables and supported their application within the Philippines, and strengthened collaborations with other groups that are active in Philippines energy issues.

The official work plan for the eleven tasks of the project established the specific direction for each task after extensive consultation with in-country counterparts. These consultations were crucial in building good working relationships between NREL and the counterpart agencies while identifying priority goals for NREL's technical assistance to those agencies. The primary counterpart organization in the GOP is the Non-Conventional Energy Division (NCED) of the Philippines Department of Energy (DOE); however, several other counterparts have also been identified, such as the Strategic Power Utilities Group (SPUG) of the National Power Corporation (NPC) and the National Electrification Administration (NEA).

NREL's technical assistance has already produced significant deliverables that have been used to advance the Philippines' renewable energy development efforts. For example, because of NREL technical assistance:

- A planned private-sector investment in renewable energy, with a focus on energy for livelihood support, is moving forward in Palawan province. A second potential investment is arranging feasibility study funding from a variety of sources, including the Global Environment Facility (GEF). (Task 1)
- NPC is currently seeking funds to support their first diesel hybridization using wind power on the Batanes Islands. (Task 2b)
- With respect to biomass resource assessment, NREL and UP Los Banos have identified methodological tools that will augment the government agency data with little extra effort. (Task 3)
- Many Philippine energy planners have been introduced to computer modeling tools to support electrification decisions. Staff members of NEA and PALECO have received initial training in these tools. Staff members of NCED have become more familiar with the tools as a result of their efforts to prepare for the major training in Manila on November 8–10, 1999. (Task 5)
- DOE has nearly completed implementation of policy and regulatory reforms to facilitate renewable energy market development. This process has taken less than one year. (Tasks 6 and 7a)
- DOE is considering support of a New and Renewable Energy (NRE) Bill incorporating a renewables portfolio standard to stimulate deployment of NRE. (Task 6)
- DOE is renewing its effort to consider microhydro technologies as a barangay electrification option (Task 7b1) and will soon have access to an improved solar resource data set to assist in solar technology deployments. (Task 7b2)
- Institutional relationships and issues for development of a sustainable renewable energy Geographic Information System have been identified. (Task 7c)

NREL has also strengthened collaborations with other groups that are active in Philippines energy issues. Three NREL task leaders and one NREL contractor presented their insights at the World Bank Workshop, "Renewable Energy Development in the Philippines," June 24–25, 1999. This workshop was conducted for high-level government officials, including the Secretary and an Undersecretary of Energy, the President of NPC, and the Director of NEA. These contributions have assisted the DOE and the World Bank in advancing their discussions of technical assistance and lending to the electricity sector. NREL's activities have complemented the efforts of the U.S. DOE to provide technical assistance on energy restructuring. In addition, through NREL's efforts, initial steps have been taken towards enhanced coordination among international development organizations for renewable energy development.

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